Taiwanese R&D

Aixtron, celebrating two decades of existence, has received an R&D grant from the Taiwanese Ministry of Economic Affairs. The joint research project with OES/ITRI (OptoElectronics and Systems Laboratories/ Industrial Technology Research Institute) aims to boost performance of Taiwan's GaN based optoelectronics for white light and UV lasers.

London's new nano centre for 2004

Work has started on the building that will house the London Centre for Nanotechnology (LCN). The interdisciplinary centre, a joint venture between University College London and Imperial College, London, will bring together engineers, chemists, physicists, biologists and medical researchers.
The 4000m^2. facility, due to be completed spring 2004, will include a 200m^2. clean room and extensive nano characterisation equipment, as well as lab and office space.
LCN scientists work includes: the development of microtriodes; STM for imaging, measuring and manipulating materials such as quantum dots; the use of AFM to investigate the mechanical unfolding of single proteins; cantilevers for detecting DNA without using fluorescent or radioactive markers; composites containing both carbon nanofibres and the PEEK polymer fibres; nanoparticle manufacturing using a micromixer chip; and finally computer modelling of nanostructures such as bismuth nanolines on silicon.

4th generation light source

Daresbury Laboratory is to work on 4GLS (4th generation light source) with an £11.5m for an the exploratory phase - a 3-year study to establish the technical know-how needed to build this innovative scientific research facility, including the construction of a prototype test facility. 4GLS is a proposed major research facility and comes hot on the heels of the award of two other major projects. These are:-

HPCx - a £53m project won by the laboratory last year to develop the most powerful academic research computer in Europe; and SuperSTEM - a project based at the laboratory and run by the Universities of Liverpool and Cambridge to develop the world's most powerful microscope.

The Northwest Development Agency (NWDA) have also announced today that they are investing £25.7m in order to develop a science park at Daresbury Laboratory, providing a direct link from the Laboratory's research to industry.

Biological Focus for Wales

Research in a new multidisciplinary nanotechnology center at the University of Swansea, Wales, will focus on the electronic properties of biological systems. By bringing together researchers from subjects as diverse as electronic engineering, biological science and chemistry, centre director Professor Steve Wilks hopes to demonstrate behaviour similar to that of many semiconductor devices.

"We're hoping to start looking at biological material as a platform for making electronic devices," Wilks said. "Using DNA or other molecules to create the equivalent of transistors or diodes."

The centre, part of a pan-Wales nanotechnology effort, is funded by the Higher Education Funding Council for Wales, the Royal Society, and the Wolfson Foundation. It will initially involve around 50 researchers, including students. Total funding is around £1.8m.

No quick fix

Don't look for instant upswing in the economy once the war in Iraq is over. University of Alabama economics professor S.D. Lee is warning that economic recovery or boom only follows major wars for several reasons: government deficit spending during the war, elimination of economic uncertainty, pent up demand and the economy's self-healing mechanism. He says: " A short war, like this one, is not as costly as a long endeavor and is not going to help the economy quickly rebound."

Contact:jpark@uab.edu.

Markets & Business

STMicroelectronics reports preliminary data showing net revenues for Q1 2003 are expected to be $1.618bn. Gross margin should be around 35%. The company says it experienced order push-outs in March for a number of its end markets, with the notable exception of digital consumers. It expects the majority of the affected products to be shipped in Q2 2003. Gross margin for Q1 was also penalised by greater-than-expected pricing pressure and a stronger Euro.

Panasonic Automotive Systems Co, of America is operating as an integrated supplier to the automotive industry in North America. It consolidates the sales and development operations of former Panasonic Automotive Electronics The company's current products include automotive audio systems, DVD rear-seat entertainment systems, deck mechanisms, speakers, displays, as well as electronics components, including sensors, switches, motors, and batteries. Panasonic Automotive is a division of Matsushita Electric Corp of America.

Merck's chemicals go electronic with Merck KGaA transferring its European activities for the semiconductor industry to a legally independent subgroup wholly owned by Merck KGaA with a management company in Darmstadt, Germany. The German subsidiary, Merck Electronic Chemicals GmbH, has already started its operations with 50 employees. Additional local companies will be established in France, Malaysia and Singapore. A total of 550 employees will work for Merck Electronic Chemicals worldwide.